

IN THE CLAIMS

Please amend the pending claims as follows:

1. (Currently Amended) A method of authenticating a client to a communication system comprising the steps of:
 - receiving at the client from a mobile station a subscriber identity corresponding to a subscriber of a mobile telecommunication network, wherein the mobile telecommunication network is separate from the communication system to which the client is to be authenticated;
 - sending the subscriber identity from the client to an authentication block of the mobile telecommunication network;
 - receiving at the client from the authentication block at least one challenge and at least one first secret based on a subscriber's secret specific to the subscriber identity;
 - sending from the client the at least one challenge to a subscriber identity module;
 - receiving at the client at least one second secret in response to the at least one challenge; and
 - using the second secret for authenticating the client.
2. (Original) The method of authenticating of claim 1 further comprising:
 - receiving a PIN from a user; and
 - transmitting wirelessly the PIN to the mobile station.
3. (Original) The method according to claim 2 further comprising:
 - encrypting the PIN before the step of transmitting.
4. (Original) The method according to claim 1 wherein the step of using further comprises:
 - encrypting the second secret to provide a encrypted second secret; and

transmitting the encrypted second secret to the communication system.

5. (Original) The method according to claim 4 wherein the step of using further comprises:

refreshing the encrypted second secret.

6. (Original) The method according to claim 1 wherein the step of sending the subscriber identity to an authentication block comprises sending wirelessly the subscriber identity to the authentication block; and the step of receiving from the authentication block comprises receiving wirelessly from the authentication block.

7. (Original) The method according to claim 1 wherein the steps of:
receiving from a mobile station a subscriber identity comprises receiving wirelessly from a mobile station a subscriber identity;
sending the at least one challenge comprises sending wirelessly the at least one challenge; and
receiving at least one second secret comprises receiving wirelessly at least one second secret.

8. (Original) The method of authenticating of claim 7 further comprising:
receiving a PIN from a user; and
transmitting wirelessly the PIN to the mobile station.

9. (Original) The method of authenticating of claim 8 wherein the step of transmitting wirelessly comprises transmitting an infrared signal.

10. (Original) The method of authenticating of claim 8 wherein the step of transmitting wirelessly comprises transmitting a radio signal.

11. (Original) The method of authenticating of claim 8 wherein the step of transmitting wirelessly comprises transmitting a low power radio signal.

12. (Original) The method of authenticating of claim 8 wherein the step of transmitting wirelessly comprises transmitting an acoustic signal.

13. (Currently Amended) A client ~~for authenticating a client~~ able to be authenticated to a communication system, the client comprising:

a means for receiving at the client from a mobile station a subscriber identity corresponding to a subscriber of a mobile telecommunication network, wherein the mobile telecommunication network is separate from the communication system to which the client is to be authenticated;

a means for sending the subscriber identity to an authentication block of the mobile telecommunication network;

a means for receiving at the client from the authentication block at least one challenge and at least one first secret based on a subscriber's secret specific to the subscriber identity;

a means for sending from the client the at least one challenge to a subscriber identity module;

a means for receiving at the client at least one second secret in response to the at least one challenge; ~~and wherein~~

~~a means for using~~ the second secret is arranged to be used for authenticating the client.

14. (Original) The client for authenticating of claim 13 further comprising:

a means for receiving a PIN from a user; and

a means for transmitting wirelessly the PIN to the mobile station.

15. (Previously Presented) The client according to claim 14 further comprising:

a means for encrypting the PIN before transmitting the PIN.

16. (Original) The client according to claim 13 wherein means for using further comprises:

a means for encrypting the second secret to provide a encrypted second secret; and

a means for transmitting the encrypted second secret to the communication system.

17. (Previously Presented) The client according to claim 16 wherein the means for using the second secret is able to refresh the encrypted second secret.

18. (Previously Presented) The client according to claim 13 wherein the means for sending the subscriber identity to an authentication block comprises a means for sending wirelessly the subscriber identity to the authentication block; and the a means for receiving from the authentication block comprises a means for receiving wirelessly from the authentication block.

19. (Original) The client according to claim 13 wherein:

a means for receiving from a mobile station a subscriber identity comprises a means for receiving wirelessly from a mobile station a subscriber identity;

a means for sending the at least one challenge comprises a means for sending wirelessly the at least one challenge; and

a means for receiving at least one second secret comprises a means for receiving wirelessly at least one second secret.

20. (Original) The client of claim 19 further comprising:

a means for receiving a PIN from a user; and

a means for transmitting wirelessly the PIN to the mobile station.

21. (Previously Presented) The client of claim 19 wherein the means for transmitting wirelessly comprises a means for transmitting an infrared signal.

22. (Previously Presented) The client of claim 19 wherein the means for transmitting wirelessly comprises a means for transmitting a radio signal.

23. (Previously Presented) The client of claim 19 wherein the means for transmitting wirelessly comprises a means for transmitting a low power radio signal.

24. (Previously Presented) The client of claim 19 wherein the means for transmitting wirelessly comprises a means for transmitting an acoustic signal.

25. (Currently Amended) A method for providing at least one secret based on a subscriber identity comprising the steps of:

retrieving from a subscriber identity module in a mobile station a subscriber identity corresponding to a subscriber of a mobile telecommunication network;

sending wirelessly the subscriber identity from the mobile station to a client for authenticating the client to the communication system;

receiving wirelessly at the mobile station from the client at least one challenge based on a subscriber's secret specific to the subscriber identity;

generating at the mobile station at least one secret in response to the at least one challenge and

sending from the mobile station wirelessly to the client the at least one secret.

26. (Original) The method of claim 25 wherein the method further comprises a step of wirelessly receiving a request.

27. (Original) The method of claim 26 wherein the request contains a PIN.

28. (Original) The method of claim 27 wherein the request contains an encrypted PIN.

29. (Original) The method of claim 27 further comprising a step of confirming that the PIN matches a identity module PIN.

30. (Original) A mobile station for providing at least one secret based on a subscriber identity comprising:

means for retrieving from a subscriber identity module a subscriber identity corresponding to a subscriber of a mobile telecommunication network;

means for sending wirelessly the subscriber identity to a client for authenticating the client to the communication system;

means for receiving wirelessly from the client at least one challenge based on a subscriber's secret specific to the subscriber identity;

means for generating at least one secret in response to the at least one challenge and

means for sending wirelessly the at least one secret.

31. (Previously Presented) The mobile station of claim 30, further comprising a means for wirelessly receiving a request.

32. (Original) The mobile station of claim 31 wherein the request contains a PIN.

33. (Original) The mobile station of claim 32 wherein the request contains an encrypted PIN.

34. (Original) The mobile station of claim 32 further comprising means for confirming that the PIN matches a identity module PIN.

35. (Currently Amended) A computer program product embodied in a computer readable medium for controlling a client in order to authenticate the client to a communication system by using a subscriber identity module of a mobile telecommunications network, wherein the mobile telecommunications network is separate from the communications system to which the client is to be authenticated; the computer program product comprising:

computer executable program code to enable the client to wirelessly retrieve from a subscriber identity module of a mobile station a subscriber identity corresponding to a subscriber of a mobile telecommunications network;

computer executable program code to enable the client to wirelessly send the subscriber identity to an authentication block of the mobile telecommunications network;

computer executable program code to enable the client to wirelessly receive from the authentication block of the network at least one challenge and at least one first secret based on a subscriber's secret specific to the subscriber identity;

computer executable program code to enable the client to wirelessly send the at least one challenge to the subscriber identity module;

computer executable program code to enable the client to wirelessly receive from the mobile station at least one second secret in response to the at least one challenge; and

computer executable program code to enable the client to use the second secret for authenticating the client; ~~characterised in that~~ wherein the subscriber identity module is accessed over a local wireless link between the mobile station and the client when wirelessly retrieving the subscriber identity from the mobile station.

36. (Cancelled)

37. (Currently Amended) A computer program product embodied in a computer readable medium for controlling a device for authenticating a client to a communications system using a subscriber identity module of a mobile telecommunications network, wherein the communications system is separate from the mobile telecommunications network, the computer program product comprising:

computer executable program code to enable the device to retrieve from a subscriber identity module a subscriber identity corresponding to a subscriber of a mobile telecommunications network;

computer executable program code to enable the device to send the subscriber identity to a client over a local wireless link for authenticating the client to the communications system;

computer executable program code to enable the device to receive over the local wireless link from the client at least one challenge based on a subscriber's secret specific to the subscriber identity;

computer executable program code to enable the device to provide the at least one challenge to the subscriber identity module and receiving at least one authentication secret in response to the challenge; and

computer executable program code to enable the device to send the at least one authentication secret over the local wireless link to the client for use by the client in said authenticating the client to the communications system.